ABSTRACT

$e^{j(2n\pi/N)}$ calculating section 101 generates a bth chip $C(a,b)$ of an ath spreading code based on $C(a,b)=e^{j(2n\pi/N)}$ where e is a base of natural logarithm and N is a length of the spreading code (i.e. spreading code length). It is assumed in the above equation that $n=a \times b$, $a=0 \sim N-1$, and $b=0 \sim N-1$. It is thereby possible to generate orthogonal spreading codes with arbitrary lengths.